**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION IX**
**75 Hawthorne Street**
**San Francisco, CA 94105**

Via Electronic Mail and U.S. Postal Service

August 24, 2012

Mr. Spence Leslie
Director, International Trade Compliance
Tyco Thermal Controls, Inc.
307 Constitutional Drive
Menlo Park, CA 94205

**Re: Toxic Substances Control Act (TSCA), Polychlorinated Biphenyls (PCBs) – USEPA Region 9 Conditional Approval under 40 CFR 761.61(c) – Tyco Thermal Controls Application Amendment #1 (Protective Multi-Media Cap)**

Dear Mr. Leslie:

The U.S. Environmental Protection Agency Region 9 (USEPA) has reviewed the August 8, 2012 requested Amendment #1 (Protective Multi-Media Cap) to modify the "PCB Cleanup Notification and Workplan" (dated June 14, 2010, Original Application).[1] Amendment #1 (attached) proposes onsite disposal of soils contaminated with PCBs above the 0.74 mg/kg total PCB (as Aroclors) cleanup level and a cap to cover and prevent exposure to these soils. These contaminated soils are generally located within the northern portion of the former Tyco Thermal Controls facility (Tyco) at 2201 Bay Road, Redwood City, California. Also, in response to USEPA's August 15, 2012 comments on the proposed modification to the PCB cleanup, SCS Engineers (SCS) clarified Amendment #1 in its August 15, 2012 letter (attached and received August 16, 2012).

This letter hereby approves Amendment #1 to the Application with conditions consistent with the TSCA requirements in 40 CFR 761.61(c). This letter also modifies USEPA's January 4, 2011 letter approving the Application. USEPA is approving the proposed PCB cleanup modifications with the conditions established below based on our review of laboratory analytical data for cleanup verification samples and associated summary Tables 1 and 2 (attached).

**USEPA Conditions of Approval – TTC Application Amendment #1**

1. **Remedial excavation backfill activities.** Prior to backfilling the excavations where soils in excavation sidewalls and /or bottom exceed the PCB cleanup level, step-out soil samples must be collected to determine the lateral and vertical extent of PCB contamination in those areas where the PCB cleanup level is currently exceeded. Laboratory analysis results for step-out soil samples must

[1] USEPA approved the June 14, 2010 "PCB Cleanup Notification and Workplan" on January 4, 2011.

be used to adjust the areal extent of the cap if based on that data such adjustments are deemed necessary. TTC must confer with USEPA on this matter before proceeding with excavation backfill and cap construction activities.

Based on the attached summary tables provided by AMEC, soils in Excavations 1B and 2B exceed the 0.74 mg/kg total PCBs (as Aroclors) cleanup level for soils and concrete. Our review of laboratory analytical data for samples EX2A-2 and EX2A-5[2] collected in Excavation 2A indicate that certain soils in Excavation 2A also exceed the PCB cleanup level. Therefore, the step-out soil samples identified in the summary tables and any additional step-out samples necessary to complete delineation of the lateral and vertical extent of PCB contamination must be collected and analyzed before excavation backfill and cap construction.

If available, submit the analysis results for the two composite samples consisting of aliquots EX2A-2A, EX-2A-2-B, EX2A-2-C, EX2A-2-D; and EX2A-5-A, EX2A-5-B, EX2A-5-C as soon as possible.

2. **Fill material to be used for cap construction.** In its August 15, 2012 letter, SCS explained that virgin material from Stevens Creek Quarry will be used as fill material for the remedial excavations. Before backfilling the remedial excavations, please submit a copy of the laboratory analysis results for samples collected from the proposed fill material demonstrating that PCBs and other contaminants are not present; or if present, PCBs are below the cleanup level and non-PCB contaminants are below California health screening levels.

3. **On-site disposal of soils exceeding the PCB cleanup level. Restrictive land use covenant. Changes in land use.** Current soil analysis data demonstrates that PCBs (as Aroclors) are present at 8 feet below ground surface at concentrations above the 0.74 mg/kg total PCBs cleanup level and up to 3,040 mg/kg total PCBs. Amendment #1 proposes to dispose of these soils onsite and to construct a soil cap above these soils. TTC is responsible for ensuring the cap will be safely constructed and that such cap will prevent further risk of injury to health and the environment.

   Condition 12[3] in USEPA's January 4, 2011 Approval of the Original Application requires a restrictive covenant that must meet certain requirements if PCBs are left in place at concentrations greater than 0.22 mg/kg. Because PCBs will remain in place above that threshold level, TTC must

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[2] The attached summary tables do not include the laboratory analysis results for samples EX2A-2 and EX2A-5. In addition, based on the review of the Laboratory Report Job Number 238213 it is not clear if two soil composite samples consisting of aliquots EX2A-2A, EX-2A-2-B, EX2A-2-C, EX2A-2-D; and EX2A-5-A, EX2A-5-B, EX2A-5-C, respectively were analyzed. The laboratory report does not appear to include analysis results for those two composite samples.

[3] **January 4, 2011 Condition 12: Restrictive Covenant.** USEPA requires that either soils at the Tyco Site be cleaned up to 0.22 mg/kg PCBs, which is USEPA's SSL for residential use; or to 0.74 mg/kg if a restrictive covenant that runs with the land is recorded in accordance with California state law that excludes the use of the TTCI property or any portion thereof for child care facilities (see Redwood City, California Zoning, Article 17, Sections 17.2 [Permitted Uses] and 17.3 [Accessory Uses]). Within 120 days after USEPA's approval of the PCB cleanup report, TTCI must record the restrictive covenant in accordance with state law. USEPA must approve of the language in the covenant. This covenant is being required under 40 CFR 761.61(c).

record a restrictive land use covenant. Additionally, this approval of Amendment #1 modifies Condition 12 by allowing onsite disposal of soils contaminated with PCBs above 0.74 mg/kg if TTC constructs an acceptable cap to cover these soils contingent and records the required land use restrictive covenant. TTC must meet the time frames and requirements for the restrictive covenant set forth in Condition 12 of the January 4, 2011 Approval and in Conditions 3 through 5 of this approval of Amendment #1.

TTC must confer with USEPA on the information that will be included in the land use covenant and submit the draft covenant for USEPA review. Final construction details for the soil cap must be provided to USEPA as part of the final PCB cleanup report and also included in the restrictive covenant. Condition 13 in the January 4, 2011 Approval contains general requirements for the PCB cleanup completion report.

4. **Cap maintenance, inspection, and repair; and alterations to the cap.** TTC and /or any future owners and/or successors must inspect, maintain, and repair the soil cap as well as any final cap in perpetuity. Routine inspections of the cap must be conducted after construction in accordance with a schedule.

   However, USEPA understands the Tyco property will be redeveloped. If redevelopment plans are currently available and those plans show that building or parking structures are planned for construction in the location of the soil cap, then such parking or the slabs and foundations of such building structures will become the final cap. In this situation, the soil cap would be considered a temporary cap that must be routinely inspected, maintained, and repaired.

   The final cap (consisting of the temporary soil cap and the parking and / or building structure slab and foundation) must be inspected, maintained, and repaired in perpetuity. The final cap must be described in the restrictive covenant. Alterations to the final cap (including the oil cap component) for installation or repairs of below ground utilities or other infrastructure must be approved by USEPA beforehand and must be discussed in the restrictive covenant.

5. **Ground water.** Based on the currently available soil PCB cleanup verification data, soils in the northern portion of Tyco contain total PCBs up to 3,040 mg/kg. PCB congener data is not available as of the date of this letter. Ground water must be tested for PCBs (may include PCB congeners) to determine if PCBs are impacting ground water via movement of colloidal particles or other source (e.g., oil).

   TTC must further confer on this matter with the San Francisco Bay Regional Water Quality Control Board (SFB RWQCB). If ground water wells are replaced at the site after completion of the PCB cleanup, USEPA is requiring that ground water samples be collected for the purpose stated above. If PCBs are detected in ground water above 0.5 ug/L based on filtered or unfiltered samples, a supplemental Application under 40 CFR 761.61(c) must be submitted to USEPA for approval before implementation. Such Application would require TTC to remediate ground water contamination due to PCBs and may include ground water remediation plans submitted to the SFB RWQCB.

6. **Sampling and analysis. Decontamination of sampling equipment, tools, and movable equipment. PCB remediation waste disposal.** Sampling and analysis must be consistent with

TTC's February 2011 Sampling and Analysis Plan, Tyco Thermal Controls, LLC" (SAP) as modified by USEPA's January 26, 2012 approval letter. Decontamination of sampling equipment, tools, and movable equipment must be consistent with the requirements in 40 CFR 761.79(c)(2) and 761.79(e). Record keeping of all decontamination conducted during sampling and cleanup, and disposal of decontamination residues must meet the requirements in 40 CFR 761.79(f) and 761.79(g), respectively. Disposal of PCB remediation waste generated at Tyco during sampling, remedial excavations, and cap construction must be disposed offsite based on the as-found (in-situ) PCB concentration and consistent with the applicable requirements in 40 CFR 761.61(a)(5)(i)(B), (a)(5)(i)(B)(2)(ii) (if as-found concentration is less than 50 mg/kg PCBs), (a)(5)(i)(B)(2)(iii) (if as-found PCB concentration is equal to or above 50 mg/kg), and (a)(5)(i)(B)(iv).

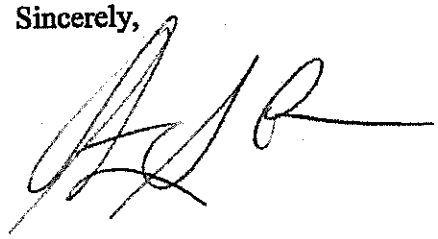
7. **Dioxin-like PCB congeners.** The January 4, 2011 Approval requires that soils be tested for dioxin-like PCB congeners (PCB congeners). Please submit the PCB congener analytical results immediately after they become available. If PCB congeners are found at concentrations that increase the risk posed by PCB Aroclors, additional soil remediation will be required. Such remediation would include soil excavation and/or capping depending on the impacts of the PCB congeners on site soils.

This conditional approval does not relieve the owner from complying with all other applicable federal, state, and local regulations and permits. Departure from the approval conditions without prior written permission from USEPA may result in the commencement of proceedings to revoke this approval, and / or an enforcement action. Nothing in this approval bars USEPA from imposing penalties for violations of this approval or for violations of other applicable TSCA PCB requirements or for activities not covered under this approval.

This approval only applies to Tyco. USEPA reserves the right to require additional characterization and / or cleanup of PCBs at Tyco Site if new information shows that PCBs remain in at Tyco above the approved PCB cleanup level in areas that were not subject to remediation and a cap or if PCBs are found at other areas of Tyco not investigated for PCBs.

We look forward to TTC's completion of the PCB cleanup at Tyco and construction of the cap consistent with the conditions of approval herein and those conditions in USEPA's letters approving the Application, SAP, and other documents related to the PCB characterization and remediation at Tyco. Please call Carmen D. Santos at 415.972.3360 if you have any questions concerning this approval letter.

Sincerely,



Jeff Scott, Director
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